

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): An image processing condition setting apparatus for determining an image processing condition defining contents of an image processing to set up the image processing condition to an image processing apparatus for executing the image processing in accordance with the determined image processing condition, said image processing condition setting apparatus comprising:

an image obtaining section for obtaining an image according to an original image to be subjected to an image processing in said image processing apparatus;

an initial image processing condition determination section for determining an initial image processing condition in accordance with the image obtained by said image obtaining section;

an image processing condition determination section for determining in accordance with an operation an image processing condition having a desired deviation from the initial image processing condition determined by said initial image processing condition determination section; and

an image processing condition setting section for setting up the image processing condition determined by said image processing condition determination section to said image processing apparatus.

2. (original): An image processing condition setting apparatus according to claim 1, further comprising an association defining section defining an association between parameter values of a first parameter in which values applied to points on a predetermined path in a parameter space defined by a plurality of sorts of second parameters defining a deviation from the initial image processing condition, of the image processing condition, are given as parameter values, and combinations of parameter values of said plurality of sorts of second parameters corresponding to the points on the predetermined path,

wherein said image processing condition determination section is designated by the parameter values of the first parameter in accordance with an operation, and determines, referring to the association defined by said association defining section, the image processing condition having the deviation consisting of the combinations of parameter values of said plurality of sorts of second parameters, associated with the designated parameter values.

3. (original): An image processing condition setting apparatus according to claim 2, wherein said association defining section is a storage section for storing a table in which the association is described.

4. (original): An image processing condition setting apparatus according to claim 2, wherein said association defining section is a storage section for storing a functional formula of parameter values of the second parameter wherein parameter values of the first parameter are given in form of argument.

5. (original): An image processing condition setting apparatus according to claim 1, further comprising a first storage section for storing a deviation of the image processing condition determined by said image processing condition determination section from the initial

image processing condition determined by said initial image processing condition determination section.

6. (previously presented): An image processing condition setting apparatus according to claim 2, further comprising a second storage section for storing parameter values of the second parameters representative of a deviation of the image processing condition determined by said image processing condition determination section from the initial image processing condition determined by said initial image processing condition determination section.

7. (original): An image processing condition setting apparatus according to claim 1, further comprising a display section for displaying a handler for a deviation adjustment from the initial image processing condition determined by said initial image processing condition determination section,

wherein said image processing condition determination section recognizes a desired deviation upon receipt of an operation of the displayed handler and determines the image processing condition having a desired deviation from the initial image processing condition.

8. (previously presented): An image processing condition setting apparatus according to claim 1, wherein said image processing condition determination section produces a plurality of images by a plurality of image processings based on the image processing condition having deviations mutually different on the image processing conditions for the initial image processing condition determined by said initial image processing condition, and determines the image processing condition of the desired image upon receipt of designation of a desired image of the plurality of images, in accordance with an operation.

9. (previously presented): An image processing condition setting apparatus according to claim 2, wherein said association defining section defines the association on a plurality of sorts of second parameters for a plurality of paths mutually different in the parameter space, said image processing condition setting apparatus further comprises a parameter selection section for selecting at a time a sort of second parameter from among the plurality of sorts of parameters in accordance with an operation, and

said image processing condition determination section produces a plurality of images subjected to an image processing based on the image processing condition for the parameter values of the second parameter selected by said parameter selection section, for the initial image processing condition determined by said initial image processing condition, and determines the image processing condition of the desired image upon receipt of designation of a desired image of the plurality of images, in accordance with an operation.

10. (previously presented): An image processing condition setting apparatus according to claim 2, wherein said association defining section defines the association on a plurality of sorts of second parameters for a plurality of paths mutually different in the parameter space,

said image processing condition setting apparatus further comprises a parameter selection section for selecting simultaneously two sorts of parameters from among the plurality of sorts of second parameters in accordance with an operation, and

said image processing condition determination section produces a plurality of images subjected to an image processing based on the image processing condition for sets of the parameter values of the two sorts of second parameters selected by said parameter selection section, for the initial image processing condition determined by said initial image processing

condition, and determines the image processing condition of the desired image upon receipt of designation of a desired image of the plurality of images, in accordance with an operation.

11. (previously presented): An image processing condition setting apparatus according to claim 10, wherein said image processing condition setting apparatus further comprises a display section for displaying the plurality of images produced by said image processing condition determination section on a two-dimensional basis in accordance with the parameter values of the two sorts of second parameters.

12. (original): An image processing condition setting apparatus according to claim 1, wherein said image processing condition setting apparatus further comprises:

an image processing section for performing an image processing for the image obtained by said image obtaining section in accordance with the initial image processing condition determined by said the initial image processing condition determination section;

a display section for displaying a handler for a deviation adjustment from the initial image processing condition determined by said initial image processing condition determination section and an image subjected to the image processing by said image processing section, and

an indication section for indicating a microscopic area on the image displayed on said display section in accordance an operation,

wherein said image processing condition determination section recognizes a desired deviation as to the microscopic area on the image indicated by said indication section in accordance with an operation of said handler and determines the image processing condition in which the desired deviation is reflected on the microscopic area.

13. (original): An image processing condition setting program storage medium storing an image processing condition setting program, wherein when the image processing condition setting program is executed by a computer system, said computer system serves as an image processing condition setting apparatus for determining an image processing condition defining contents of an image processing to set up the image processing condition to an image processing apparatus for executing the image processing in accordance with the determined image processing condition, said image processing condition setting program comprising:

an image obtaining section for obtaining an image according to an original image to be subjected to an image processing in said image processing apparatus;

an initial image processing condition determination section for determining an initial image processing condition in accordance with the image obtained by said image obtaining section;

an image processing condition determination section for determining in accordance with an operation an image processing condition having a desired deviation from the initial image processing condition determined by said initial image processing condition determination section; and

an image processing condition setting section for setting up the image processing condition determined by said image processing condition determination section to said image processing apparatus.

14. (previously presented): An image processing condition setting apparatus according to claim 1,

wherein said initial image processing condition comprises at least one of an auto set up, a visual set up, a function set up, and an assist set up condition.

15. (previously presented): An image processing condition setting apparatus according to claim 1, wherein said initial image processing condition is automatically computed by the image processing condition setting apparatus in accordance with a result of an analysis for the obtained original image by a predetermined program and the image processing condition is determined by an algorithm of the program as an optimum for the original image.

16. (previously presented): An image processing condition setting apparatus according to claim 1,

wherein the image processing condition is fed to an image processing condition output section and then outputted from the image processing condition output section to the image processing apparatus

17. (previously presented): An image processing condition setting apparatus according to claim 1, wherein the operation is performed by an operator of the image processing condition setting apparatus.

18. (previously presented): An image processing condition setting program storage medium according to claim 13, wherein said initial image processing condition comprises at least one of an auto set up, a visual set up, a function set up, and an assist set up condition.

19. (previously presented): An image processing condition setting program storage medium according to claim 13, wherein said initial image processing condition is automatically computed by the image processing condition setting section in accordance with a result of an

analysis for the obtained original image by a predetermined program and the image processing condition is determined by an algorithm of the program as an optimum for the original image.

20. (previously presented): An image processing condition setting program storage medium according to claim 13, wherein the image processing condition is fed to an image processing condition output section and then outputted from the image processing condition output section to the image processing apparatus.

21. (previously presented): An image processing condition setting program storage medium according to claim 13, wherein the operation is performed by an operator of the image processing condition setting apparatus.

22. (previously presented): An image processing condition setting apparatus for determining an image processing condition defining contents of an image processing to set up the image processing condition to an image processing apparatus for executing the image processing in accordance with the determined image processing condition, said image processing condition setting apparatus comprising:

an image obtaining section for obtaining an image according to an original image to be subjected to an image processing in said image processing apparatus;

an initial image processing condition determination section for determining an initial image processing condition in accordance with the image obtained by said image obtaining section; and

an association defining section defining an association between parameter values of a first parameter in which values applied to points on a predetermined path in a parameter space defined by a plurality of sorts of second parameters defining a deviation from the initial image

processing condition, of the image processing condition, are given as parameter values, and combinations of parameter values of said plurality of sorts of second parameters corresponding to the points on the predetermined path.

23. (new): The image processing condition setting apparatus according to claim 8, wherein said plurality of images are produced at a predetermined time.

24. (new): The image processing condition setting apparatus according to claim 8, wherein said plurality of images comprise the desired deviation from the initial image processing condition.

25. (new): The image processing condition setting apparatus according to claim 8, wherein said plurality of images are available to an operator during the setting of the image processing condition.